The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A rearview vision system for a vehicle, comprising:

at least two image capture devices positioned on the vehicle and directed rearwardly with respect to the direction of travel of said vehicle; and

a display system which displays an image synthesized from outputs of said image capture devices and which approximates a rearward-facing view from a single location.

2. The rearview vision system in claim 1 wherein said single location is forward of the driver with respect to said direction of travel and said rearward-facing view is unobstructed by the vehicle.

3. The rearview vision system in claim 1 wherein said image capture devices are spatially separated.

4. The rearview vision system in claim 1 wherein the displayed image includes a dead space which would be occupied by said vehicle in said view.

5. The rearview vision system in claim 4 wherein said dead space is the size of a footprint of said vehicle in said view.

6. The rearview vision system in claim 4 wherein said dead space includes perspective lines which are aligned with said direction of travel.

7. The rearview vision system of claim 1 wherein said at least two image capture devices comprises at least three image capture devices.

8. The rearview vision system in claim 7 wherein said at least three image capture devices include at least two side image capture devices positioned on opposite lateral sides of said vehicle and at least one center image capture device laterally between said side image capture devices.

9. The rearview vision system in claim 7 wherein said at least three image capture devices are at substantially the same height.

10. The rearview vision system in claim 7 wherein said at least three image capture devices are aimed along non-parallel axes.

11. The rearview vision system in claim 8 wherein the displayed image includes an image portion from each of said image capture devices and wherein said image portion from said center image capture device has a vertically central portion and vertically upper and lower portions, wherein said upper and lower portions are laterally wider than the said central portion.

12. The rearview vision system in claim 8 wherein the displayed image includes an image portion from each of said image capture devices and wherein said image portion from said center image capture device is compressed.

13. The rearview vision system in claim 8 wherein the displayed image includes an image portion from each of said image capture devices and wherein each of said image portions has a horizontal field of view that is less than 70 degrees.

14. The rearview vision system in claim 13 wherein said horizontal field of view of said center image portion from said center capture device is less than approximately 12 degrees.

15. The rearview vision system in claim 14 wherein said horizontal field of view of said image portion from said center image capture device is between approximately 3 degrees and approximately 8 degrees.

16. The rearview vision system in claim 1 wherein said display system includes multiple contiguous display surfaces, one of said surfaces for each of said images.

17. The rearview vision system in claim 1 wherein said display system includes a display surface for displaying all of said images.

18. The rearview vision system in claim 1 wherein each of said image capture devices is a CMOS imaging array.

19. The rearview vision system in claim 8 wherein the displayed image includes an image portion from said center image capture device which has a horizontal width that is narrower than the horizontal width of image portions from said side image capture devices.

20. The rearview vision system in claim 19 wherein said horizontal width of said image portion from said center image capture device is dynamically adjustable.

21. The rearview vision system in claim 20 wherein said horizontal width of said image portion from said center image capture device is adjustable in response to vehicle speed.

22. A rearview vision system for a vehicle, comprising:

at least three image capture devices mounted to the vehicle and directed rearwardly with respect to the direction of travel of said vehicle, at least two of said image capture devices being side image capture devices respectively mounted on opposite lateral sides of said vehicle and at least one of said image capture devices being a center image capture device mounted between said side image capture devices; and

a display system which displays an image synthesized from outputs of said image capture devices, the displayed image including an image portion from each of said image capture devices;

wherein the image portion from said center image capture devices is compressed.

23. The rearview vision system in claim 22 wherein said image portion from said center image capture device is vertically compressed.

24. The rearview vision system in claim 23 wherein said image portion from said center image capture device is compressed by deleting particular ones of said lines.

25. The rearview vision system in claim 24 wherein a greater number of lines are removed further away from a vertical center of said image portion from said center image capture device.

26. The rearview vision system in claim 24 including adjusting values of adjacent pixels as a function of pixel values of removed lines.

27. The rearview vision system in claim 22 wherein said image portion from said center image capture device has a vertically central portion and vertically upper and lower portions, wherein said upper and lower portions are laterally wider than said central portion.

28. The rearview vision system in claim 22 including a dead space vertically below said image portion from said center image capture device.

29. The rearview vision system in claim 28 wherein said dead space is the size of a footprint of said vehicle in said view.

30. The rearview vision system in claim 28 wherein said dead space includes perspective lines which are aligned with said direction of travel.

31. The rearview vision system in claim 22 wherein said display system includes multiple contiguous display surfaces, one of said surfaces for each of said image portions.

32. The rearview vision system in claim 22 wherein said display system includes a display surface for displaying all of said image portions.

33. The rearview vision system in claim 22 wherein each of said image capture devices is a CMOS imaging array.

34. The rearview vision system in claim 22 wherein said at least three image capture devices are at substantially the same height on the vehicle.

35. The rearview vision system in claim 22 wherein said at least three image capture devices are aimed along non-parallel axes.

36. A rearview vision system for a vehicle having a gear actuator, comprising:

at least two image capture devices positioned on the vehicle and directed rearwardly with respect to the direction of travel of said vehicle;

a display system which displays an image synthesized from outputs of said image capture devices; and

image enhancement means for enhancing the displayed image including a graphic overlay superimposed on said image.

37. The rearview vision system in claim 36 wherein said graphic overlay includes indicia of the anticipated path of travel of the vehicle.

38. The rearview vision system in claim 37 wherein said graphic overlay is disabled when the vehicle's gear actuator is not in reverse gear.

39. The rearview vision system in claim 37 wherein said indicia has a form that responds to the rate of turn of the vehicle.

40. The rearview vision system in claim 39 wherein said indicia form responds to at least one of the vehicle's steering system, the vehicle's differential system, and a compass.

41. The rearview vision system in claim 36 wherein said graphic overlay has a form that is a function of at least one of the direction or travel and speed of the vehicle.

42. The rearview vision system in claim 36 wherein said graphic overlay is a distance indicia indicating distances behind the vehicle of objects juxtaposed within the grid.

43. The rearview vision system in claim 42 wherein said indicia has a form that responds to the rate of turn of the vehicle.

44. The rearview vision system in claim 43 wherein said indicia form responds to at least one of the vehicle's steering system, the vehicle's differential system, and a compass.

45. The rearview vision system in claim 36 wherein the displayed image approximates a rearward-facing view from a single location.

46. The rearview vision system in claim 45 wherein said single location is forward of the driver with respect to said direction of travel.

47. The rearview vision system in claim 36 wherein the displayed image includes a dead space which would be occupied by said vehicle in said view.

48. The rearview vision system in claim 47 wherein said dead space is the size of a footprint of said vehicle in said view.

49. The rearview vision system in claim 47 wherein said dead space includes perspective lines which are aligned with said direction of travel.

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